April 1991

the Co-op Spirit

people helping
people with
personal technology

Volume 1, Number 3 April 1991

Published by
TechAlliance
19309 West Valley Hwy, Suite R-109
Kent, Washington 98032
Office: 206/251-5222
BBS: 206/251-0543

THE CO-OP SPIRIT is the monthly newsletter of TechAlliance, a non-profit computer cooperative committed to providing members with resources that increase the understanding and enjoyment of personal computers. The co-op provides members with user groups for the Amiga, Apple // Family, Macintosh, and MS-DOS machines. Both beginning and advanced assistance are provided at our various Special Interest Group Meetings. The Kent, Washington office is presently being set up as a resource center for our local members. Members can peruse the software and book library. This newsletter is our official organ and is sent to every member. It consists mostly of contributions from the membership which include industry news, machine-specific articles, and other items of interest.

MEMBERSHIPS: TechAlliance Memberships may be obtained by filling out the form on the back cover of this newsletter and mailing it, along with your dues, to TechAlliance. Annual Membership dues are $25.00 per year; $35 per year outside the U.S.

DISCLAIMER: The editor, staff, and contributors of this newsletter assume no liability for damages resulting out of the publication of any article, hint, or programming code. In addition, the opinions presented regarding reviews and/or the mention of products indicate no affiliation or endorsement of products by TechAlliance. The views expressed in this newsletter are those of individual contributors and not necessarily those of TechAlliance.

PERMISSION TO REPRINT: Unless specified otherwise, articles in this publication may be reprinted by other nonprofit user groups, provided credit is given in the byline to both the author and newsletter from which it was taken, and a copy of the user group's newsletter is mailed to TechAlliance.

SUBMISSION DEADLINES: The deadline for articles, news, and meeting announcements will be the 1st of the prior month. All articles must be submitted on a 3½"disk in ASCII text format with hardcopy included *(this is the preferred method)*, or articles may also be uploaded in ASCII text format to the TechAlliance BBS with hardcopy submitted by mail. TechAlliance reserves the right to review, edit, delete or accept articles at its discretion.

MEETING SCHEDULE: Please see last pages of newsletter for meeting schedules and times.

Co-Editors ..... Sharon Farquhar, Exec. V.P.
Shirley Reinhardt, Office Manager
Volunteer Assistants ..... Gerry Drake & John Keithly
Design/Production ..... Carol Dillon

TechAlliance Board of Directors

Walt Nelson, *President* — **Sharon Farquhar,** *Secretary*
Anthony Fortini, *Vice-President* — **Richard Hubert,** *Director*
Dave DeGroot, *Treasurer* — **Robert Huelsdonk,** *Director*

SIG Groups	BBS SIGOPS	SIG Leaders
Amiga	John Keithly	Peter Barnes
Apple//	Richard Hall	Phil Lindberg
Apple //GS	Gerry Drake	Phil Lindberg
Macintosh		Dave Maulding
MS-DOS	Bob Caldwell	Sharon Farquhar
MacProgrammer	Robert Riebman	Robert Riebman
//GS Programmer	Robert Hess	
"C" Programmer		Doug Trueman

TechAlliance BBS System Operator – Paul Stout

The TechAlliance BBS

With over 1,000 validated users, the TechAlliance BBS is one of our fastest growing services. Users find valuable technical material on this BBS, including discussions of basic and technical programming problems, viruses, and select postings from other online sources such as USENET.

The board's download libraries contain technical notes, sample code, and a collection of the usual fonts, utilities, stacks, etc.

Many of our current users are familiar with several computer environments, so crossover questions get good attention. And where possible, communication across computer types is encouraged. For example, the graphics library is largely in GIF format.

To sign on, simply call 206-251-0543. Our system uses standard modem parameters, 300-1200-2400 baud, 8 bit, no parity, one stop bit. We have three phone lines with automatic roll-over connection to the next available line. ▲

Letters to the Editor

We received the following message from a member and thought you would find it as amusing as we did:

> "Dear TechAlliance,
> I became very distressed when I received your February issue of the Co-op Spirit. I immediately went to my doctor and had a check-up. He advised me that I could stop worrying and that in spite of the fact that I was a member after June 1st, 1990 I am very much alive even though it is printed on page 2 that I expired. . ."

We also received a few phone calls along this same line. Our apologies for the incorrect wording in "Why am I getting this newsletter?"

Toward the end of a letter from a long-time Apple II user and member of TechAlliance were these encouraging words:

". . . It was great to get the new newsletter, a bit disappointing in its initial content — but I am still pleased to see what I hope to be the first of a Phoenix-like rebirth of the Call-Apple spirit a la Val Goldring. . . ."

Thanks. By the way that's "Golding". Val Golding was our founding member back in 1978. The Co-op Spirit's destiny is in the hands of you, our members. Keep the letters coming. But let's also get some articles, tips and reviews coming this way. We'll be watching the mail. ▲

Home Computers... They *Will* Sell This Time

by Shirley Reinhardt

(Editors Note: We thought some of you might find this article interesting. It was written as a Microeconomics term paper. Some of the market structure data has been eliminated due to space constraints.)

Home computers will be the consumer product of the decade. We heard this in the early 1980s when hundreds of thousands of first generation personal computers (PCs) flooded the market and were snatched up by eager consumers. By 1983, when mainstream computer makers entered, greedy for their share of the profits, an all out price war sent many running from the home computer market. There were devastating losses compounded by the general economic recession of 1983/84. Texas Instruments (TI) exited the market after a $624 million write-off. In April 1985, after 15 months of market embarrassment and $40 million in ads, IBM pulled its unaccepted PCjr off the market. What is different now? Why are IBM, Tandy, Apple, and others investing millions in research, development, and marketing aimed at the home computer market? They are betting it all on a shift in demand that started emerging in 1987 based on "... lifestyle changes—the shift to two-income families, the rise of single-parent households, longer workdays, and lengthier commutes."[1]

This emerging demand was a shift of the home computer market away from the very-low-cost, low-power Commodore 64s, original Apple IIs, Osbornes, TRS80s, and TI type of hacker and game machines. Instead "... they were choosing low-priced knockoffs of the IBM PCs they were using at work."[1] PC clones flourished. Even IBM's market researchers were stunned to find that 20% of their PS/2 business machines were being used at home. The home PC market had grown to 3.7 million units annually. Major PC makers wanted a share of that emerging mass market.

IBM introduced its new PS/1 June 26, 1990, which went national August 28. Tandy followed on July 25th with its 1000 RL. Apple brought out its three new low-cost Macintoshes in October. "Apple has stepped up monthly production (of the $999 Mac Classic) by 50%. But buyers snapped up the 1990 supply by Thanksgiving. "We could have sold twice as many if we'd had them," says Robert Puette, Apple USA president,"" (BusinessWeek, Dec. 31, 1990). And clone makers continue to pitch their low-priced models to home buyers, too. "Experts say the home computer-market is worth $7.6 billion—and some say the new machines could boost sales by 16 percent a

..continued on page 4

Letter to TechAlliance Members

Dear Member,

This newsletter is the result of considerable hard work by a very limited number of people. In order to continue along this vain, it is necessary that participation by others be encouraged. We are a co-operative. That means that we work together to the benefit of all!! All articles submitted to date have been written by people in the Seattle area. This issue of the Co-op Spirit will be mailed to approximately 5,500 members. If you are interested in this newsletter continuing, we must have more participation! Please write or send in articles that will be of interest to our members! I know there is a large group of you who are Apple II users across the nation, plus, all of you Macintosh, Amiga, and MS-DOS computer users.

In addition, we are looking for a person to volunteer to act as editor of this publication. This person must be familiar with PageMaker or some other publishing program and be ready to make a commitment to put this newsletter together in a timely, professional manner. It is a big job, but needs to be done on a volunteer basis. If you are interested, please call TechAlliance and we can give you the details! It is a fun and challenging job.

Please, we would like to hear from you!!

Sincerely,

The Co-op Spirit Editors

ANNUAL MEETING

Tuesday, April 2, 1991

6:30 p.m.

The meeting will be held at our office in Kent. Come and meet your new Board of Directors. There will be a treasurer's report and also a "State of the Co-op" address.

continued from page 3

year through the mid 1990s," (U.S.News, Sept. 10, 1990).

This time the major PC makers have done their homework and they know what consumers want. "The big difference now is that computers have become fixtures in the lives of millions of Americans: Some 28 million workers have personal computers on their desks, while another 8.2 million PCs are used in schoolrooms, reports researcher WorkGroup Technologies Inc. "Computer literacy is an order of magnitude higher than it was five years ago," says Frank A. Ingari, vice-president for new-market development at Lotus Development Corp. . . "[1] The psychology is right, but what will motivate people to buy, computer makers say, are the lifestyle changes that have put the pressure on Middle America.

A PC in the den or a spare bedroom is one way to ease some of that pressure. Single parents or parents in two-income families can leave a busy job in time to have quality time with the family before youngsters are in bed. Then they can use the PC to finish up the work they brought home from the office. Home PCs are also allowing more flexibility in work schedules. Quiet time working at home until the morning rush hours pass saves time on the road and offers concentration time that is at a premium in some work environments. "Link Resources figures that 57% of the 27 million or so American households that own PCs buy them for work related purposes."[1]

Working entirely at home is an inexpensive way for budding entrepreneurs to get their businesses started. My husband, myself and a friend operated a PC software business out of our home from 1978 until we were slowly squeezed out of the market between 1982 and 1984. We developed and marketed programming utilities and adventure games. What else would you sell to hackers and gamers? Our last offering in the increasingly competitive and changing market was small business software. EZ-Ledger and EZ-Invoice sold relatively well, but we succumbed to financial pressures and all ended up working for a local PC user support group. Researching this paper has given me a lot of insight into the inevitability of the exit of so many small firms from the market during that time.

Our specific niche was in the Apple II segment of the 1980s home computer market. Apple II users were extremely loyal in the early days and many still are to this day. Our original Apple II system with 48K of random access memory (RAM), an archaic tape drive for data storage, and a inefficient dot matrix printer cost well over $3000 in 1978. Our current and fourth PC system, an Apple Macintosh SE/30 with a dot matrix printer, cost us about $3600 by the time we upgraded it to 5 megabytes of RAM. That's an increase in memory alone of over 100 times. Then there's the included built-in data storage units; a 40 megabyte hard drive and a 1.4 megabyte super drive that can read and write files from and for other types of machines. While our system is considerably above the average home PC in computing power and price, it serves to illustrate that today's home-workers, from fashion designers to desktop publishers, have the advantage of vast leaps in technology when setting up home offices.

John Mahoney, a former painter and sculptor, specializes in designing corporate brochures and other material in his New York apartment. "The technology has completely changed the way I live,"[1] claims Mahoney, 45.

Once a PC enters the home for one reason, usually work, according to Link Resources, consumers find other ways to maximize their investment. ". . . Home PCs are usually used by two or three family members. Some 47% want them for schoolwork, for instance, and 19% want to automate their budgeting, tax figuring, and letter-writing."[1] The seemingly endless variety of software attests to the earnestness with which PC users push the outer limits of desktop power.

Speaking of software, the effects of complimentary goods on this market are not to be overlooked. Workers already competent in the use of word processors, spreadsheets, data bases, and more are eager to put these tools to work at home. Their eagerness is only constrained by their home software budget. The software industry has been prolific. "PC sales are riding the wave of new programs from the industries biggest software developers. The new spreadsheets, data bases, and word processing packages are faster, more colorful, and easier to use than their predecessors. They also require more sophisticated machines," (BusinessWeek, Aug. 6, 1990). Some consumers, especially power hungry veteran PC users, are using this as the excuse they've been looking for to upgrade to more powerful machines. After all, Suzy really needs to take the old PC back to college with her. The competition is tough and Suzy needs the competitive edge the PC will give her in college classes now and in the labor market later. Of course Suzy will need a modem to keep in touch with Mom and Dad via electronic mail.

Monitors, memory expansion and speed-up cards, network paraphernalia, dot matrix, ink-jet and laser printers are all part of the expanding PC peripheral market; as is the modem. But the modem is a complimentary product of special status. The modem is the vital connection between PCs and electronic bulletin boards or on-line service networks.

"To sustain the market, computer makers have to come up with more ways to make the home PC more useful. For IBM the answer is information services."[1] IBM and Sears (major distributor of the PS/1) are the backers of Prodigy, an on-line information services system that allows users (for a monthly fee) to access mail-order sales outlets, check the stock market, book travel reservations, search data bases, and that's just the beginning. If the home PC market takes off as experts predict, Prodigy could be a big winner and visa-versa. Currently Prodigy screens are relatively slow and shopping goods are far from bargain priced, but it does have its advantages over other on-line services. Most services charge by time used which averages about $7 an hour. Prodigy at $9.95 per month is gaining popularity.

On-line services, peripherals, and software—these complimentary goods certainly affect the outward shifting demand curve for home PCs. But the impetus that drives this expanding market are the lifestyle changes that give consumers the ability and willingness to trade dollars for more efficient tools.

The home computer market of the 1980s, with its toys that consumers soon tired of, has gone to seed. The seed has mutated. Tools, unlike toys, have a way of becoming necessities. The evolving 1990's PC tools and time-savers are becoming permanent fixtures in the busy lives of Americans, young and old. Computer illiteracy is fast becoming a hindrance few can afford.

Home computers—they will sell this time. ▲

Footnotes:

1. BusinessWeek, September 10, 1990: "Home Computers—Will They Sell This Time?", pp 64-75

COMMODORE'S BABY – CDTV IS BORN

Threads taken from UseNet by Scott Rowin.

Edited by Peter Barnes.

Commodore International Limited announced the worldwide introduction of the CDTV player—the industry's first compact disc-based consumer Interactive Multimedia player—at the Winter Consumer Electronics Show on Wednesday, January 9, 1991. The press conference drew quite a crowd with reporters there from the New York Times, The Wall Street Journal, Billboard, MTV, among others. The CDTV player, based on Amiga technology, will be available in the US and Europe this spring. Suggested retail price was quoted as $999. It will be test marketed only in certain US and UK cities, including New York, Los Angeles, Chicago, San Francisco, Dallas, and Denver where it will be sold through such retailers as Montgomery Ward, Video Concepts, McDuff, and Software Etc.

Here are some important points from the CDTV spec sheet:

- Motorola 68000 CPU running at 7 mHz. with 1 MB of RAM.
- 512K storage per front panel Personal Memory *SmartCard*.
- 8X oversampling, 102 dB S/N, and 16-bit D/A converters.
- Will play standard audio CD's, CD + Graphics (CD+G format CD's which are mostly music but also contain a few minutes of video), CD + MIDI, and CDTV Proprietary Format discs.
- Uses the ISO/9660 subset of the High Sierra standard CD format so, with the proper software drivers, CDTV may (this may be a BIG may!) be able to read any IBM or Mac CD-ROM on the market.
- Optional SCSI Interface.

continued on page 6

How I Learned to Love TAD
alias The Art Department

by J.L Keithly

Yes, I did spend my last Saturday working solid on a new software package sold by ASDG Incorporated . . . you know that same long-time, Amiga devoted company that has also brought us the VD0: recoverable ram disk VD0:, the FACC II floppy disk memory acceleration package, and the IEEE-488 standard Dual Serial Board.

This time ASDG has created a relatively inexpensive image rendering program that truly can perform wonders . . . especially if you want to transfer digitized (bitmapped) screen images onto hardcopy media. Understand, I'm not an avid 3-D animator, or a fractal graphics gnome (though I am amazed at what has been done by others on a Amiga when exploring these realms). My pastime of choice is probably best described as "image hacking" or "image processing" if you prefer a more commonly accepted term.

After digitizing a picture with DigiView or downloading an image file from a BBS, I have very much enjoyed embellishing my visual bitmaps with judicious tweaking, torquing and twisting using image conversion packages such as Butcher, or PIXmate. But these software programs are weak when it comes to controlling the printing of one's own masterpieces onto paper. (Actually, neither PIXmate nor even my 1.0.2 version of TAD offer a "copy image memory to printer" option). Of course, combining the Amiga Preferences program which comes with AmigaDos 1.3 and any of several screen capture utilities can make up for much of this deficiency. Personally, I have tended to use Express Paint 3.0 with Preferences to control my printer's output since it allows creating a "virtual page". An Express Paint virtual page is actually a screen that scrolls a super-bitmap; the super-bitmap can be made as large as an entire sheet of printer paper. With this configuration, every super-bitmap pixel can be associated with a printer dot and as long as I'm content to simulate something like what a monochrome monitor can display, I can ensure total control over what actually will show up on as a screen dump to my printer as output.

But to print images with sixteen shades of gray, I was still having problems, so I was most pleased to read that ASDG had come up with TAD (The Art Department) to take care of my remaining woes. You see, unless one uses a linotronic halftoning process—not something most people can afford for home hobby or small office use—dot matrix, ink jet and laser printers are constrained to making either single sized dots or dithered patterns of dots to simulate the many possible grey levels contained in each variable intensity pixel that makes up a digitized image on a computer screen. This means that recreating a digitized screen image with lots of gray shades will require an equal number of variable density dither patterns. This would be okay except that larger size dither patterns can often be seen and thus mask the natural texture that the eye expects to perceive as a true representation. So what to do?

The approach that I took was to take advantage of TAD's image enlarging feature along with it's ability to simultaneously reduce an image's gray shades while introducing on-screen dithering. Allow me to elaborate a bit more with an example.

I began with a 320x200 (low resolution), 16 gray level, digitized picture of a fish skeleton i.e., the skull region; see figure 1. Not your average R-rated subject, but then I am fairly sure it will pass any copyright infringement claims. My very next step was to call upon TAD. I first enlarged this image to 640x400. Now I had a screen containing my subject which was essentially magnified by 4 times it's original size. Why did I do this? I wanted to trade the information contained in all those screen pixel gray levels for horizontal dithering space that my printer could make use of. My next step was to apply TAD's Floyd Stenberg dithering routine (one of six dithering patterns avail-

continued on page 6

...continued from page 5

able in TAD) and also reduce the number of screen pixel gray levels to four. TAD's on-screen dithering dramatically diminished the blocky pixelation effect created by the magnification. Reducing the gray levels made it possible to minimize the size of the dithering patterns preferences. My printer driver would need to recreate the remaining gray levels still present in the screen image.

I was now done with my image rendering, so I saved my image as an IFF file, exited TAD, and reloaded my picture for printing using Express Paint. Since my DeskJet printer can reproduce graphics at 300 dpi, I created a 2400x3000 pixel virtual page (yes I do have 1 megabyte of chip ram and 4 megabyte of fast ram) and then pasted my graphic image onto the virtual page where it would fit with the other images I had planned to place next to it.

The final step was to set-up Preferences so as to be most compatible with what I had already put together. After selecting the printer gadget in the initial Preferences window, I entered the Graphics One window and clicked on grayscale pattern 2 since this choice often seems to work very nicely with images containing 4 levels of gray. I then chose "smooth" and "ordered dithering" from the Graphics Two window selections because I wanted to antialias my subject's border with the printer paper's white background and I wanted my TAD created screen dither pattern to remain as intact as possible. The final result is shown as figure 2. (Please keep in mind that the printed image you are looking at was not actually created on my DeskJet . . . although, I having compared the results with my own work and the differences are negligible.)

The results looked so nice, I thought I'd try TAD again to enlarge my 640x400 image to 1280x800. So I did. But this time my results weren't quite as satisfactory; see figure 3. It now appeared that although the interior texture was more detailed, my edges were getting too large and jagged for a simple dither and smooth operation to remove the aliasing effects. So, I felt that I had probably done enough for one day and decided to tackle the faults in my second enlargement at a later date—maybe with an edge smoother routine.

At this point you may be saying hey this can get to be a lot of work! True, but it should soon be made somewhat easier with the arrival of TAD Professional. The professional version will provide more image processing functions and an ARexx interface so that just about the entire process described above could be made into a series of automated macros.

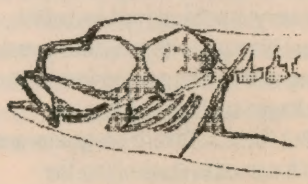
So now you can appreciate how I've come to be so quickly fond of TAD which together with an Amiga (with some expanded memory very advantageous), a software printing package, a printer, and an adequate supply of digitized images, can make possible the production of some very satisfying hardcopy products. Who knows, you might not even want to use those India ink drawing pens anymore!

A quick caveat. . . as I said at the beginning, I've only spent one long day on this; I'm sure there are those out there who have been at this sort of thing for much longer sessions using either TAD or other software packages which can likewise enhance the making of hardcopy graphics (PixelScript comes to mind as a strong possibility). With the benefit of their experience, I'm sure some of these people would recommend alternative approaches to achieve no doubt better results. Nonetheless, I suspect this field is far more full of artists than engineers and so I feel quite confident that the kind of experimentation which I have described here will be at least a good beginning guide for most anyone trying to get pleasing results in transferring the Amiga's screen graphics to paper. ▲

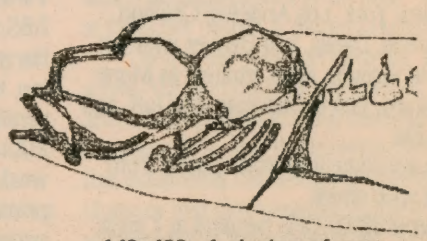
CDTV

...continued from page 5

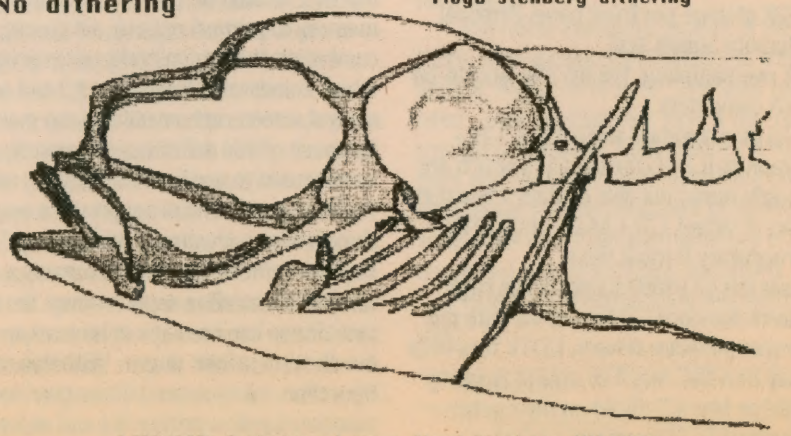
- Serial and Parallel Ports for printer and modem.
- Video output to NTSC (Composite), Super-NTSC, PAL, Composite/Hi8, and Super VHS.
- Infrared handheld remote unit controls all major functionsof the unit and also sports Nintendo/GameMachine-type control rocker-type buttons.
- Optional infrared remote keyboard, mouse, and joysticks will be available; the unit basically resembles an Amiga 500 in concept (but not appearance: CDTV is all black with digital displays).
- Operates under AmigaDOS V.1.3.
- Discs are first loaded into a caddy and then inserted into the machine. This may give more accurate tracking than tray-type loaders. ▲



320x200 (original)
16 shades of grey
No dithering



640x400; 4 shades of gray
Floyd Stenberg dithering



1280x800; 4 shades of gray; Floyd Stenberg dithering

IMAGE WRITER // PAPER ADVANCE WORRIES – *SOLVED!*

By Norman Dodge

(Editor's note: With the Apple][GS, when you are either at the desktop or in a ProDOS-16 based program, there is a nice little NDA availableto control the paper in your Imagewriter II. It is called MYPAPER.SHK on TechAlliance's BBS. Unfortunately, when in Appleworks NDAs are not available. Thus the following.)

In Appleworks, one of the most frustrating things about using the ImageWriter][is getting the paper out after you have typed a letter. You must first crank it forward, tear off the paper, and then remember to crank the paper back to the top of the form position. This dilemma is not enjoyed by the ImageWriter LQ nor is it a problem with the ImageWriter I, both of which have a means to advance the paper line by line and then reverse the line feeds back to the top of the form position. Also most frustrating to me is to get into Appleworks and have the default left and right margins of 1.0 and 1.0 respectively. With a macro compiler installed with Appleworks the following Macros may just prove handy to you.

1. Advance 10 line feeds, pause to let me tear off the paper, and then reverse feed 10 lines back to the top of the form position. That is the first macro, ba-3.
2. Reverse feed the paper back to a position far enough out of the way to permit me to shift to friction feed and insert an envelope to be printed. This is ba-4.
3. Take out the default settings of Appleworks margin settings of 1.0 for left and right margins and change them to 0.0. This ia ba-m

Both macros 1 & 2 will work with other printers if you can figure out what the CHR $ code is to tell the printer to reverse and forward line feed - may take some doing. I believe that Epson uses CHR$ J n where n/216" is for forward feed and CHR$ j n where n/216" is for reverse mode. READ your printer specifications in your manual

Copy these macros into your file, compile, and you are ready to go. There is nothing sacred about the name of the macros - use any name you choose.

```
start
<ba-3>:<all (MODIFICATION-
ADDITION)><PR# 1><Print CHR$ 31 9><Print
CHR$ 31 1><msg '  Tear Off Page - RETURN
To Realign - ESC to Quit    ': input : msg
""><Print CHR$  27><Print CHR$ 114><Print
Chr$ 31 9><Print CHR$ 31 1><Print CHR$
27><Print CHR$ 102><PR# 0>!
```

Feeds paper up to tear off and then return to top of form

```
<ba-4>:<all (MODIFICATION-
ADDITION)><PR# 1><Print CHR$ 27><Print
CHR$ 114><Print CHR$ 31 9><Print CHR$
31 5><msg'        Platen Now Clear For Hand
Feed - RETURN     ': input : msg ""><Print
CHR$ 27><Print Chr$ 102><PR# 0>!
```

Backs up cog paper so that hand feed can be used.

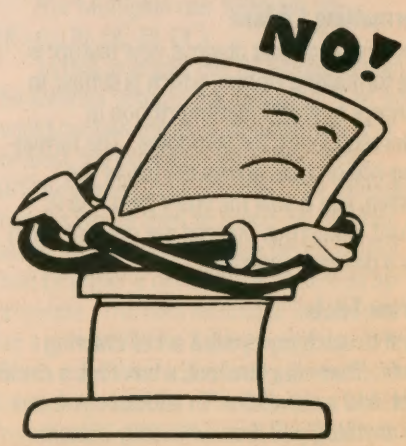
This macro automatically takes the margins out to zero

```
<ba-m>:<awp (MODIFICATION
ADDITION)><oa-0>LM<rtn>0<rtn>RM
<rtn>0<rtn><Print CHR$ 27>!
```

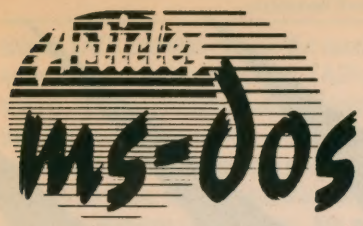
The following macro automatically compiles the current AWP file.

```
<ba-c>:<awp $0 = "Macro Compiler" :
oa-esc find rtn rtn>NB! compile current file;
end
```

In macros 1 & 2 Print, CHR$ 31 n, for the ImageWriter II controls the number of lines of print you are advancing n >= 1 <= 9 if you wish to advance more than 9 lines you must put in a series of CHR$ 31 n so you can get the proper advancement you wish. Please make sure in Macro 1 that your forward advance and reverse advance are the same or else your result will be that the paper tear-off will not be at the same place every time. ▲



OOPS! NO MAC ARTICLES THIS MONTH... DOESN'T ANYONE HAVE ANYTHING TO SHARE? (SEE MASTHEAD ON PAGE 2 FOR DETAILS ON SUBMITTING ARTICLES.)



Microsoft Excel 3.0 First Impressions

By Steve Cavanaugh

Introduction

I had just read about the forthcoming Excel 3.0: Microsoft had sent me an upgrade offer with a few details of what to expect. The department secretary had already sent a check for my upgrade when an order arrived for an employee who had just left the company, and there in the box was Excel 3.0. Naturally, I "procured" it until my own upgrade arrives. Since I've only been using Excel 3.0 for about a week, and I don't consider myself a spreadsheet power user, I can't get into too much detail, but I can report on my experience to date. If the last week is any indication, I'm in love with Microsoft Excel.

Obvious New Features

Straight out of the box, Excel has numerous obvious enhancements over the previous version. I haven't used all of the new features, and I haven't picked up the books yet (sheepish grin), but I have actually accomplished some real work: work that I couldn't accomplish with the old version of Excel.

Formatting Ribbon

The first and most obvious new feature is the formatting ribbon, which is similar in concept to the formatting ribbon in Microsoft Word for Windows. The formatting ribbon runs across the top of the screen, just below the entry field. As in Word, numerous buttons are present, each for a different function.

Draw Tools

First to catch my eye is a set of drawing tools. There is a line tool, a box tool, a circle tool, and a curve tool. In addition, you can fill anything you draw with fully customizable colors. The objects you draw float on top of the spreadsheet, in effect hiding the cell contents underneath. I haven't done it yet, but I understand you can import graphics and lay them on top of the sheet too. In the menus, you'll discover drawing related tools that should be familiar: Group/Ungroup, Front/Back, Patterns, Placement, Protection. You can even assign a macro to an object!

Text Box Tool

One of the neat items on the ribbon is a text box tool. You draw a text box right on top of the sheet, just as you would a rectangle in the draw mode, only there's an insertion point blinking inside the rectangle. The box is re-sizable (word wrap is dynamic), and there on the ribbon are formatting buttons for Bold, Italic, Left/Center/Right justification, and styles. It sure is nice to be able to annotate my spreadsheet with text boxes.

Chart Tool

In the same grouping as the text box is a button with a chart on it. You work this button just like you work charts in the old Excel: select the data you want to chart and then click on the chart button. When you drag your pointer across the sheet diagonally, a chart pops up on top of the sheet. The chart can be moved about on the sheet, and can be re-sized at will.

Sum Tool

I don't know about you, but the most frequently used function in my spreadsheets is the sum() function. Microsoft must have known this is common, because right there on the ribbon is a sum button. But it does more than just paste the sum() function into a cell, it tries to guess what you want summed. It does this by putting the selection indication around the cells it thinks you probably want to sum. If you structure your sheets just right, you never have to identify the range when you want to sum because it will find it automatically. If it guesses wrong however, it's a simple matter to just mouse over to the correct cells and be done with it. This is a nice feature that I used from the first day.

Macro Button Tool

Another of the tools on the ribbon is the button tool. You select the tool, and drag diagonally on the sheet. This creates a button, and a dialog box pops up to ask you which macro you want assigned to the button. Neat! Now I can put those macros right where I can get at them.

Outlining

Also on the ribbon are several buttons having to do with outlining. I have to confess, I have never used outlining in the context of a spreadsheet before. From what I can ascertain, some third party vendor offered an outlining tool to enhance Lotus 123, and the race was on. Anyway, I'll have to play with the Excel version a while before I understand it. It's supposed to *automatically* figure out where it is appropriate to set outline levels, but I have no idea how it does it, or if it does it well. More later on this feature.

3-D Charts

One of the niftiest additions to Excel is the incorporation of 3-D charts. I have to admit, these charts are probably more beautiful than functional, but I just couldn't help printing out about a dozen 3-D Line, Column, Pie, and Area charts for all my standard data at work. You should have heard all the ooh's and ahh's when my cohorts saw these charts.

The 3-D charts can be rotated 360 degrees, you can change their perspective, and you can look at them from any angle, even directly underneath! I was able to make some charts that look very much like the 3-D bar charts Byte Magazine uses in their reviews. Very nice.

One of the neatest things you can do with the chart function is to import a graphic and use it in your chart (like stacking airplanes in a column chart on airline growth for example). I haven't as yet accomplished this, but I have seen it several times.

Bits and Bytes

Tax Preparation with a Spreadsheet

By Bill Cowell

Consolidation

Another new feature in Excel 3.0 is Consolidation. Consolidation is used when you have several sheets that are all set up alike, and you want a summary of the data in them. You define the range to be included in the consolidation, which sheets to include, and what kind of calculation to do, and Excel will put the results in a summary sheet you've prepared. This feature alone makes the upgrade worthwhile.

Using the Consolidation feature, I was able to set up a fairly complex set of dependent spreadsheets for about 30 different project budgets. The budgets belonged to 3 different sections in my department, and each section had two to five projects. Each project had two classes of project cost account numbers, and in each class there were up to 10 different cost collection accounts. I was able to set up summaries at 4 different levels using a network of about 7 tiers and including data referenced in secondary sheets, and I did the whole thing in 3 days. The key is, with the old version I couldn't do it at all.

Conclusion

My first look at Excel 3.0 makes my mouth water. Excel has come a long way since the first version on the Macintosh, and this version goes a long way toward putting Excel at the forefront of the spreadsheet wars. And I just scratched the surface: Excel comes with a Dialog editor (so you can roll your own dialog boxes), Q+E (a database front end that has drivers for a number of popular data formats including dBase and of course Excel) and more. As you can probably tell, I'm sold. ▲

(Editors note: All cell references are to the spreadsheet printed at the end of this article.)

Since this is tax month I thought I would devote my whole article to the use of a spreadsheet for tax preparation and analysis. There are a number of commercial programs, such as Turbo Tax, which will take you by the hand and walk you through the process. These programs offer you the advantage of having done an analysis of the tax changes for you. They also support the print out of multiple copies of your final tax forms. If, however, you are like me, and you do your own tax information investigation, then a spreadsheet is a less expensive way to go. Once you have created the templates it is easy to update it with the new tax rates and make the other changes that Congress and the IRS thinks you can't do without. Developing your own customized tax template can also serve as a good introduction to the use of a spreadsheet. If you use a dot matrix printer and print in the condensed mode, its possible to get several tax schedules all on one sheet of 8 1/2 by 11 paper. Even with the several schedules that I require I get my complete tax data and calculation on one sheet of paper. The following discussion will assist you in developing your own customized template. The formulas given are for a Lotus spreadsheet, but should work with any spreadsheet that can read the Lotus .WK? format. I have assumed that anyone who has used any spreadsheet is familiar with the commands to SUM a column and knows how to copy a value from one cell to another.

You should start by entering abbreviated 1040 line items in Column A of your spreadsheet. Column B then will get the actual values. These may be entered directly or be calculated in the appropriate supporting schedule (i.e. Schedule B,C,D, etc.). If the value is calculated in a supporting schedule, the total should also be transferred to column B.

Actually only two techniques are required that may be new to some spreadsheet users. The first involves the situation where an exclusion amount is to be subtracted from a subtotal. This is necessary when you are determining the allowable medical deduction. A similar case involves determining whether you should use an itemized or a standard deduction. When subtracting the exclusion amount, the result cannot be a value less than zero. When you are choosing either itemized or standard deduction, the IF statement should select whichever is larger. The following formula is an example of the formula that should be entered into a cell just below the subtotal of your medical expenses. This same formula can be COPY'ied (replicated) into other cells where a similar calculation is required. These include allowable casualty losses over $100, and miscellaneous deductions which must exceed two percent of your gross income. A sample of the formula would look like this:

@IF((B7-B8)<0,0,B7-B8)

(for Multiplan use: IF(R[-2]C-R[-1]C<0,0,R[-2]C-R[-1]C)

In this example, cell B7 would contain the subtotal without the exclusion. Cell B8 would contain the exclusion amount. (For medical, the exclusion value would be .075*Adjusted Gross Income). The example formula would then be typed into the cell below B8. The value shown in cell B9 will then be either a net amount, or zero as appropriate. The next technique involves using a spreadsheet's *Table Lookup* capability. This is used when calculating the correct tax for each tax bracket. The following table is from the IRS 1990 (Married) Tax Table. It should be entered in the bottom of your template.

continued on page 10...

BITS & BYTES...continued from page 9

Married TAX Table (1990)

0.00	0.00	0.15	0.00
32450.01	4867.50	0.28	32450
78400.01	17733.50	0.33	78400
162770.01		0.28	162770

The last three columns are taken directly from the IRS tax schedule. From left to right it shows the base tax amount for a taxable income at least as much as that shown in the last column. The middle column is the percent rate charged for the amount over the base amount. The percentage is used until the taxable amount jumps into the next tax bracket. The added first column is used as a method of assuring the taxable amount computed is derived from the correct tax bracket up to and including the maximum for the bracket. First the spreadsheet calculates a base tax amount using the following formula:

@VLOOKUP(B32,A42...D45,B34)
(for Multiplan use)
LOOKUP(R[-3]C[-1],R[+3]C[-1]:R[=13]C)

B32 is the cell with the calculated taxable income. It is used to determine the correct value in the lookup table. The value is found one position over from the left column of the defined table (A42...D45)
For the delta %:

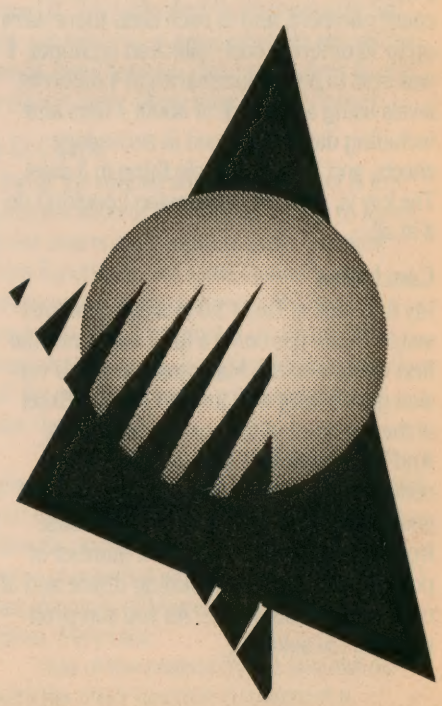
@VLOOKUP(B37,B42...D45,1)
For the total tax:

(+B32-@VLOOKUP(B32,A42...D45,0))*B38+B37

It is probably easier to enter the values and formulas, and go through the example than it is to follow the explanation. It should be noted that the values computed must be replaced with values shown in the IRS Tax rate tables for incomes under 50,000 dollars. The computed values are very close to the table amounts.

When each year's tax forms are available you can update the template to reflect correct line numbers or to include any other last minute change to the tax reporting requirements. For instance, the allowable amount of deductible interest, other than home mortgage, goes from 10% for 1990 to zero for 1991. If you would rayher not take the time to build the template, I will send you a disk with sample tax templates for 1990 and 1991 for $2. Send a check to Cowell Computers, 11901 26th Place SW, Seattle, WA 98146. ▲

```
   1990 Income tax-Married  Schedule A          JAN 26, 1991      Schedule D       |RENT & ROYALTY INCOME
                                                                                    ----------------------------
Exemptions            3.00 ! MEDICAL           |  CHARITY        | CAPITAL GAINS  |          A
----------------------------|1.Med&dent        |Cash      155.00 |Partner  4000.00 |3.Rents  3400.00
7.Wages           28000.00 |                57.00 |Other      25.00 |RCA       345.00 |----------------------------
8.Interest          650.00 |                      |Total     180.00 |IBM       578.00 |EXPENSES
9.Dividends         850.00 |              200.00 ------------------ |          --------|5.Ads      14.00
10.Tax Refunds        0.00 |Total         257.00 CASUALTY(FORM 4684)|Gain     4923.00 |6.Travel
11.Alimony            0.00 |LESS7.5%AG   2873.48 |Loss             |                 |7.Maint   325.00
12. Business       1234.00 |4.L1-L3         0.00 |Less Insur       |Taxable  4923.00 |8.Comm
13.Capital Gain    4923.00 ---------------------|Exc 100    100.00                  |9.Insur   122.00
14.Cap Gain dist.     0.00 |TAXES               |Less10%AG 3831.30                  |10.Legal
16.IRA Distrib        0.00 |State Inc       0.00 |Total       0.00                 |11.Inter  786.00
17.Pension & annu     0.00 |RE Tax       2200.00 ------------------                 |
18.Rents/Partsh    2631.00 |Per prop       45.00 MISC DEDUCTIONS                    |13.Repai  432.00
21.Social sec.        0.00 |Other           0.00 |Union                            |14.Suppl   12.00
22.Other             25.00 |Other           0.00 |Tax Prep     0.00                |15.Taxes  768.00
23.Total Income   38313.00 |Total        2245.00 |Education   35.00                |16.Utili  155.00
-------------------------------------------------|Other       225.00               |18.Other    0.00
Adjustments                |INTEREST            | Total      540.00               |   Other   55.00
24.IRA *              0.00 |Home         2200.00 |-2%AG       766.26               ----------------------------
25.Spouse IRA         0.00 |Invest int      0.00 |Total         0.00               Total Exp 2669.00
xx.Other              0.00 |Other Int.     46.00 | OTHER      0.00               Depreciat 1500.00
30.Total Adjusts      0.00 |  "           345.00 |------------------               Total     4169.00
31.Adjusted Gross 38313.00 |Other tot.     391.00 |SUMMARY OF DEDUCTS               Net Inc   -769.00
--------------------------|.10xOther      39.10 |Medical       0.00               ----------------------------
Tax Computation            |Int.Deduct    2239.10 |Interest   2239.10               Ln 26. Total Rental income
32.(Line 31)      38313.00                       |Taxes      2245.00               Ln 31.Partnership Income
34.Deductions      5450.00                       |Contrib     180.00               ----------------------------
 Ln 32 - ln 34    32863.00                       |Casualty      0.00               Ln 40.Total Supplemental
36.Exemptions      6150.00                       |Misc Ded      0.00
37.Taxable Income 26713.00                       |TOTAL      4664.10
                                                 STD DEDUCT 5450.00
TABLE RANGE           1.00                       NET DED    5450.00
                                                  Uses max. of std ded or itemized
  Tax Calculation
Base Amount           0.00 Tax(Ln39)    4006.95
Delta %               0.15 Credits        20.00
Total 90 Tax       4006.95 90 TAX       3986.95                  * Use IRA if adjusted gross
                                                                   is less than 40000
 Tax Table - Married
          0.00     0.00       0.15      0.00
      32450.01  4867.50       0.28  32450.00
      78400.01 17733.50       0.33  78400.00
     162770.01                0.28 162770.00
```



ORG Disk Optimizer

by Paul Stout

I have been a beta tester the last 7 to 8 months for an outstanding shareware product called ORG. The current registered version is 1.32 and the latest beta release is 2.23. The ROM BIOS incompatibilities that seemed to plague versions 1.30 and earlier have been eradicated.

ORG is a disk optimizer/defragger that really out does both COMPRESS from PC Tools and FR from Norton's Advanced Disk Tools. It offers a much better set of options and, in terms of speed, really blows away any other disk optimizer I have ever seen. The speed of operation will vary depending on your hardware, but on my rather slow MiniScribe 3650, 67 meg RLL drive, it was approximately 4 to 6 times faster than PC Tools Compress.

What do you get? For starters, you have the option to specify exactly which files get moved to the front of the disk and which ones are to be locked in place and not moved. You can specify how the files in each directory will be sorted. These options can be specified (for files) by name, attribute, or by directory. The sort options affect each directory. You may also specify file(s) that will be automatically deleted when the program is run. That is rather nice for getting rid of all of those *.BAK* files just before doing a backup. The group of allowed options all use wild cards.

The default operation is for the two DOS system files to be locked into place and the directories to be moved in exactly the directory/file order you have them on disk. For example, if you use Norton's DS to sort the directories yourself, then ORG will optimize them in the order you sorted them. This allows you to optimize the order of the directories on the hard disk to minimize disk defragmentation. You can sort using DS, or any other directory sorter, so it places the directory entries in your root drive entry so that those that get changed the most are at the tail end of the list with those changing the least at the top of the list. And that will be the order that ORG will place them on the hard disk, starting with the files in the root directory. Also, sub-directories will be placed immediately following their parent directory.

This is excellent if you use a disk cache program like ADCACHE, HYPERDISK, or PC-CACHE that can read in multiple tracks at once. Several of my larger disk intensive programs, upon loading, already have the required data/overlay files in memory as result of running the main program. Try doing any of the above with FR or COMPRESS! You can't.

A very nice feature is the unattended option. By use of a command line option you can have ORG run unattended, late at night for example, have your disk optimized during those hours when you aren't using the computer.

One thing you will immediately notice, especially if you have a noisy drive like I do, is that there is considerably less movement of the drive read/write heads as ORG is doing its job. And, the feature about the placement of the sub-directories, has shown up in some noticeably faster loading times in my disk intensive programs like Windows.

This program is a winner, and the price at $35 is a bargain. One caveat, the shareware version of the program will only work with 32 meg or less hard disk partitions. In v1.32 the number of directories and files that can be defragged is limited by memory. This means that those with huge hard drives (200 megs+) are out of luck for the moment. I've used v1.32 on up to 90 meg partitions without a hitch. If you use DOS 4.01 and extended partitions larger than 32 megs, then you will have to use the registered version. Trust me, it works, as that is exactly how my system is set up. I have junked Compress on the BBS computer and I'm now using ORG in it's place. I already use it at home and have yet to have any problems I can highly recommend it to all.

A newer version, v2.2x, should be released shortly that will use expanded, extended, or XMS extended memory and remove any memory limitations on disk partition size. The new version is significantly faster than the current release, adds several new command options, and is more robust. ▲

Board Briefs

FEBRUARY 20, 1991

This board meeting, held at TechAlliance Offices, was called to order at 6:30 pm, February 20, 1991.

Walt Nelson, President, presided over the meeting.

Also present:

Anthony Fortini, V.P.
Dave DeGroot, Treasurer
Sharon Farquhar, Secretary
Bob Huelsdonk, Director
Dick Hubert, Director
Jude Bevis, MTJ Staff
Steve Toutonghi, MTJ Staff
Julianna Ross, MTJ Staff
Miriam Harline, MTJ Staff

MacTech Journal:

The magazine staff introduced Julianna Ross and Miriam Harline to the Board, and explained the change in the magazine staffing. The promotional plan and budget projections for that plan were then presented to the BOD.

Member Services:

Kent Swap Meet

Sharon Farquhar informed the BOD that TechAlliance will participate in the Kent AM Swap Meet on March 9. Dave DeGroot will be the coordinator for that event.

Renewals

Projected date for having renewal forms prepared is mid-March.

Bob Huelsdonk made a motion to send renewals to every member whose membership has lapsed and/or will expire before June 30, 1991. Anthony Fortini seconded the motion. It passed unanimously.

April 2 Annual Meeting

The agenda for the annual meeting will be to introduce the new board members, give a state of TechAlliance message, and (tentative) a speaker to make a presentation.

TDBS Runtime Module

Dave DeGroot made a motion to purchase the module. Anthony Fortini seconded. 1 approved and 5 abstained. The motion passed.

PNWPC

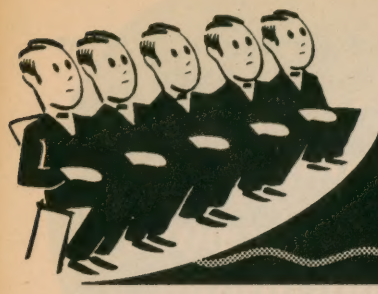
Sharon Farquhar reported that Bill Loveless of PNWPC User's Group came by TechAlliance Offices on 2/19/91 to discuss a merger with TechAlliance. They are looking for office space on the west side of Seattle to house their equipment and provide office space.

Sharon Farquhar had concerns relating to the security of the equipment in the office. It appears last month, someone entered the building inappropriately. It was the agreement of the Board that the locks should be changed.

Walt Nelson again stated that he is resigning with the election of the new board members.

The minutes of the January 16, 1991 meeting were approved with a 5 to 1 (abstention) vote.

Meeting adjourned at 10:30 p.m. ▲



Meeting Briefs

MACINTOSH SIG

March 12, 1991 – by Dave Maulding

A very *Special Thanks* goes out to Area Sales Representative, Meredith Church, of Microsoft, and Charles W. Kyd, President of The Kyd Group, for their talks on the Microsoft applications Word 4.0 and Excel 3.0(!).

Charles Kyd consultant and author of the books *Microsoft Excel Business Source Book*, both in the Mac and windows format, and *Excel Macro Book*, soon to be published. Charles went through many of the new features that the new Excel has. Excel 3.0 is not ected to ship until mid April or early May.

Meredith Church, of Microsoft, explained many special and some hidden features of Word 4.0. Such things as placement of graphics in the text and, for the Word 4.0 power user, how to add and change commands.

There were only 17 attendees, so this meeting was like sitting at home having these people demonstrate the applications. Come be a part of our group and enjoy the benefits.

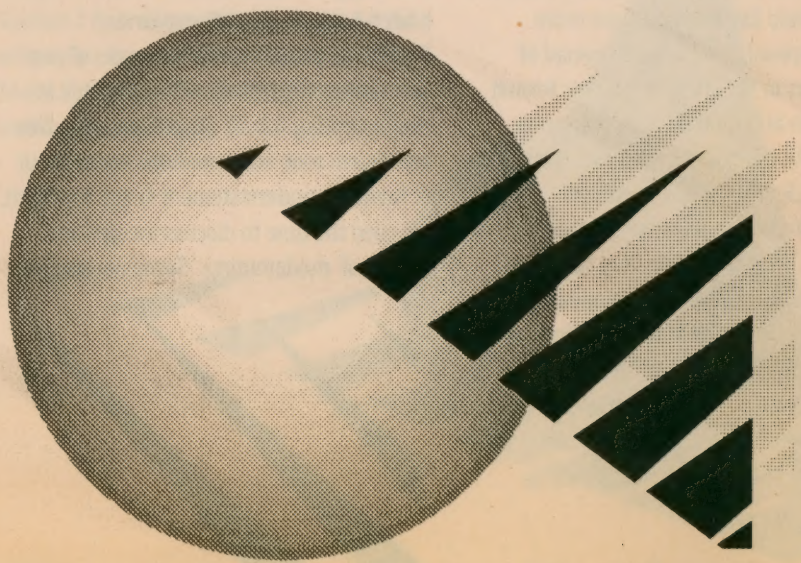
AMIGAlliance

February 13, 1991– by Peter A. Barnes

At February's AMIGAlliance meeting we were treated to a demonstration of one of Commodore-Amiga's latest high-technology products: CDTV. We are among the select few Users' Groups in this area who have been allowed to see this Compact Disc Player/CD-ROM Player/Amiga Computer hybrid in person and in operation. Thanks to Jim Walley and Synergistic Software. (See a separate article in this newsletter for further details about the machine.)

Jim Walley also gave us a report on the Las Vegas Consumer Electronics Show he attended recently. While most of the show was dominated by Nintendo and other such game machine companies, Commodore was there with its new CDTV unit. Apparently there are quite a few software companies developing programs on CD-ROM for the new machine. With 650 Megs. of space per disc, existing games can be greatly enhanced with TONS of additional graphics and sounds for the CD-ROM versions. We're another step closer to truly interactive "MultiMedia" experiences.

Dick Thomas spoke a few words about the recent Videographics Seminar put on by Commodore-Amiga at Seattle's Westin Hotel. Some great demonstration animations were shown there and the virtues of the Amiga line of computers were extolled. Of course, at least 75% of the attendees already owned Amigas so much of the preaching was to the already-converted. For the uninitiated, *Video Applications* - on the Amiga was described as *easy and simple* because of its Graphic User Interface and its built-in video graphics display capabilities; *Video Compatible* amounts to an analog RGB signal with a 15.75 KHz interlaced horizontal scan rate which does not require any of the very expensive scan convertors or inline interlacing devices which other computers demand. *Overscan* display is supported by both Amiga hardware and software which no other computer can claim, and even the Amiga's display aspect ratio (4:3) matches



MEETING BRIEFS...continued from page 13

that of standard video; *Powerful and Productive* - custom co- processing chips, real-time multitasking, non-segmented RAM, ideal for multimedia productions, built-in 4-voice/2-channel audio with automated speech synthesis, etc. etc.; and *Flexible and Modular* - extensive selection of add-on expansion and peripheral devices. Also, character generation, image processing, paint graphics, 3-D imaging, animation, 2-D animation, and 3-D animation make the Amiga perfect for video production and post-production. Yes, yes, we have known about all these Amiga capabilities for years; these are the very reasons that we bought Amigas in the first place!

John Keithly finished off the evening with a demonstration of ASDG's *The Art Department*, a new image enhancement and image processing program. Though it seemed to be a *memory hog* (it is also available in a professional version which, no doubt, would like to enjoy even more memory space), T.A.D. has a myriad of capabilities in the areas of graphic format conversion and modification of graphic images. All the popular graphics standards, such as GIF, IFF, TIFF, etc. can be supported as optional graphics loads modules. It seemed to be very helpful in the optimization of printed images.

Thanks to John for bringing in his own Amiga 2500 with 5 megabytes of RAM. The program should work fine on an Amiga 3000, but needs more memory than the 2 megabytes our new machine contains.

By the way, if anyone would like to demonstrate any new software they can get their hands on, please let me know. We are usually struggling to find topics and/or speakers for our monthly meetings. The same holds true for this great new Newsletter: if you can write an article for it, please do! Thank you.

P. S. The *Second Quarter Report* from Commodore International Limited dated December 31, 1990 begins with this encouraging statement: "In the quarter ended December 31, 1990, Commodore International Limited recorded the second largest sales quarter in its history." It goes on to say that Net Income more than tripled in this quarter compared to the same period a year ago, and increased nine-fold (!) in the 6 months ended December 31, 1990, compared to the same period last year. Good news, good news. Two million sold, and going strong.

APPLE II SIG

March 5, 1991 – from Gerry Drake

Four large pizzas and six six-packs of pop were enjoyed by all. (Don't expect this at every meeting folks!) Since Operation Dessert Storm took our scheduled speaker out of town (an understatement to say the least), we used the time to discuss the ups and downs of modemming. Some people had specific questions which we answered if we could. Then we hooked up to the TechAlliance BBS and generally looked around. Again questioned were answered. New areas for exploration on the TBBS were pointed out to those of us who didn't know every nook and cranny.

MS-DOS SIG

February 25, 1991 – by Sharon Farquhar

Bill Caldwell brought in his magnificent 386 machine. We all took a minute or so to do the official OOOHs and AAAHs. Then, Steve Cavanaugh gave a very professional presentation on Microsoft Windows 3.0. The topics he discussed were setup, working environment, program manager, control panel, file manager, and some of the applications included with Windows 3.0. Steve also spent some time talking about moving the Windows installation using DOS, multitasking, the system editor, speeding up the system, and trouble areas such as shadow RAM, caches, and video RAM/ROM. Later in the meeting, Bill Cowell gave us a briefing on what he saw at Comdex last fall. We also had a raffle and gave away a copy of Multi-Mate to Gil Sta. Maria. Congratulations Gil!! In order that most of us felt satisfied, the SIG gave away five shareware programs too. It was quite a meeting! ▲

April 1991 Special Interest Group Meeting Information

ANNUAL MEETING

TUE APRIL 2,1991 - 6:30 P.M.
Meet your new Board of Directors. There will be a treasurer's report and a "State of the Co-op" address.

AMIGALLIANCE

Meeting topic for April was not settled by press time. But we will do our best, as is usual, to plan an interesting meeting for all. But it's that time of year again!
AMIGAlliance's Constitution tells us to hold elections in April for the SIG positions of Chairman, Vice-Chairman, and Secretary/Treasurer. Unless someone else has a burning desire to take over the leadership of AMIGAlliance, your current Chairman (Peter Barnes) is ready, willing, and able to serve yet another year, if a vote of confidence supports him. ("I feel like I'm Just getting the hang of it!" — P.B.) We do need candidate/volunteers for the other positions, however. Anyway, please attend the April Meeting and exercise your right to vote. Hope to see you there.

APPLE// FAMILY

Toby Allard, our main speaker this month, will demo the *Quickie Scanner* and its associated software, *InWords*. The second topic for the evening will be Desktop Publishing with Appleworks IIGS.
Since Operation Dessert Storm is over, we plan to reschedule our local shareware author, Ken Franklin, as soon as he returns to the area.

MACINTOSH

This month we're going to stray into the field of CD ROM, not those little 5-1/4 inch CD's, but the large 12 inch type. Optical Data Corporation of Kent will be our guests. ODC specializes in educational interactive CD's. Teachers and home schoolers should make a special note to try and attend this meeting.

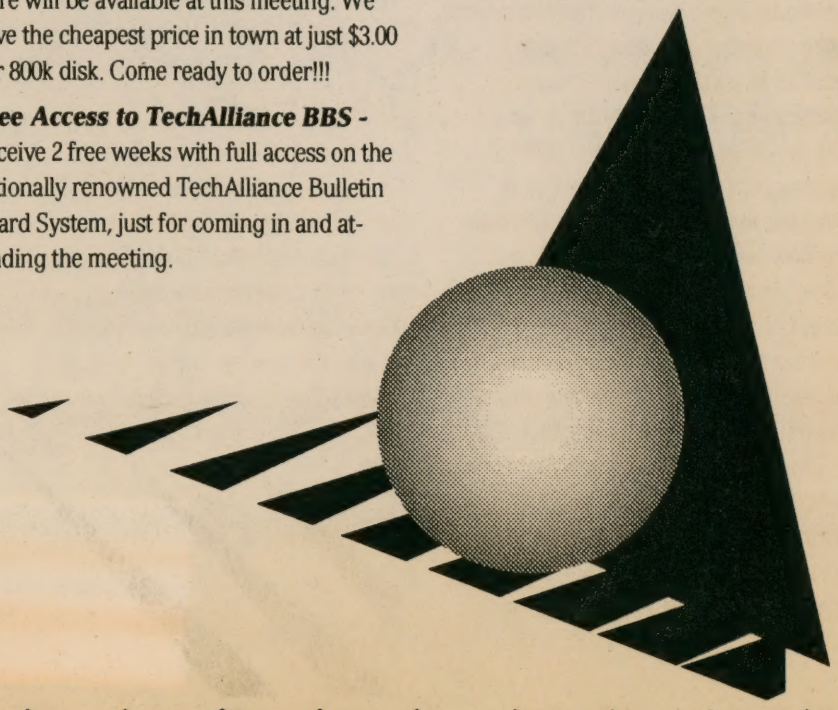
MacHelp - Mac Help is 45 minutes of help and question answering on the basics of the Macintosh. Mac Help starts at 6:45 p.m. and is offered every month at the same time.

Public Domain Software & Shareware - Our extensive library of software will be available at this meeting. We have the cheapest price in town at just $3.00 per 800k disk. Come ready to order!!!

Free Access to TechAlliance BBS - Receive 2 free weeks with full access on the nationally renowned TechAlliance Bulletin Board System, just for coming in and attending the meeting.

MS-DOS

Alan Zullig will be bringing in his demo copy of *New Wave 3.0. New Wave* by Hewlett-Packard is an operating environment which runs on top of Windows. This program changes the feel and look of the current *Microsoft Windows* environment. It is becoming widely known for its agent and object-sharing features and how fully it automates and integrates applications from various software vendors. If you have had any experience with *New Wave*, by all means come to the meeting and discuss it with us. Your input, ideas, and thoughts are the reason for our SIG. So come join us Tuesday night! ▲



TechAlliance Application for Membership or Renewal

Yes! Sign me up for one year's membership in TechAlliance for $25.
(International memberships are $35.)

Name _____ Daytime Phone _____

Address _____ Home Phone _____

_____

City _____ State _____ Zip _____

☐ Check Enclosed ☐ New Membership

☐ Charge my bank card (VISA or MasterCard) ☐ Renewal

Card Number _____ Expiration Date _____

Signature _____

April Meeting Schedule

***Advance sign-up required for these meetings.*

Tue., April 2nd:	Annual Meeting - 6:30 p.m. IIGS (& II Family) SIG - 7:30 p.m.
Tue., April 9th:	Mac Help Session - 6:45 p.m. Mac SIG meeting - 7:30 p.m.
Wed., April 10th:	Amiga New User Class - 6:30 p.m.** AMIGAlliance - 7:30 p.m.
Sat., April 13th:	Amiga New User Class - 10:00 a.m.**
Tue., April 16th:	Voluntary Advisory Comm. 7:00 p.m.
Wed., April 17th:	Mac Programmers SIG - 7:00 p.m.
Tue., April 23rd:	MS-DOS Beginner's Corner - 6:30 p.m. MS-DOS SIG meeting - 7:00 p.m.
Tue May 7th:	IIGS Beginners Session - 7:00 p.m. IIGS (& II Family) SIG - 7:30 p.m.
Meeting Location:	All meetings are held at the office unless otherwise specified.

TechAlliance
a computer cooperative
Suite R-109
19309 West Valley Hwy
Kent, WA 98032

Bulk Rate
U.S. Postage
PAID
Seattle, Washington
Permit No. 2726